

## What is Claimed Is:

- 5        1. A binder composition comprising a mixture of a thermosetting spray dried phenolic resole resin and a crystalline phenolic compound having two or more hydroxyphenyl groups wherein the quantity of resole resin is from about 45% to 90% and the quantity of crystalline phenolic compound is 10% to 55%, by weight, of the binder.
- 10      2. The binder of claim 1 in the form of a blended powder.
- 15      3. The binder of claim 2 wherein the phenolic ingredient of the resole is phenol itself.
- 20      4. The binder of claim 2 wherein the resole resin is prepared with formaldehyde.
- 25      5. The binder of claim 2 wherein the resole resin is prepared with a molar ratio of 2 to 3 moles of formaldehyde for each mole of phenol.
- 30      6. The binder of claim 2 wherein the crystalline phenolic compound is bisphenol-A.
7. The binder of claim 2 wherein the crystalline phenolic compound is a member selected from the group consisting of bisphenol-A, bisphenol-AD, bisphenol-C, bisphenol-E, bisphenol-F, bisphenol-S, bisphenol Z, and mixtures thereof.
8. The binder composition of claim 2 wherein the crystalline compound is bisphenol-A, the quantity of resole resin is from about 60% to 80% and the quantity of the crystalline phenolic compound is 20% to 40% and wherein the resole is prepared from phenol itself and formaldehyde in a molar ratio of about 2 to 3 moles of formaldehyde

for each mole of phenol.

9. A thermoset product prepared by heating a blend comprising a thermosetting spray dried phenolic resole resin and a crystalline phenolic compound having two or more hydroxyphenyl groups wherein the quantity of resin is from about 45% to 90% and the quantity of crystalline phenolic compound is from about 10% to 55%, by weight, based on the weight of said resin and crystalline phenolic compound.

10. The product of claim 9 wherein the crystalline phenolic compound is bisphenol-A.

11. The product of claim 9 wherein the blend comprises 55% to 85% of resole resin and 15% to 45% of crystalline phenolic compound.

12. The product of claim 9 wherein the blend comprises 60% to 80% of the resole resin and 20% to 40% of the crystalline phenolic compound.

13. A molding compound comprising: (a) a filler; and (b) a blend of a crystalline phenolic compound having two or more hydroxyphenyl groups and a thermosetting spray dried phenolic resole resin wherein the quantity of resole varies from about 45% to 90% and the quantity of crystalline phenolic compound varies from about 55% to 10% based on the total weight of resole and crystalline phenolic compound.

14. The molding compound of claim 13 which is substantially free of hexamethylenetetramine.

15. The molding compound of claim 13 wherein the quantity of the blend varies from about 15% to 60% by weight of the molding compound.

16. A molded article comprising about 10% to 92% by weight of a filler bound under heat and pressure with a blend of thermoset binder said binder comprising, by

weight, about 45% to 90% of a spray dried phenolic resole resin and about 10% to 55% of a crystalline phenolic compound having two or more hydroxyphenyl groups.

17. The molded article of claim 16 wherein the crystalline phenolic compound is  
5 bisphenol-A.

18. A method for making a molded article which comprises subjecting a mixture of a  
filler and a blend of thermosetting spray dried phenolic resole resin and a crystalline  
phenolic compound having two or more hydroxyphenyl groups to heat and pressure in  
10 order to cure the blend wherein the blend comprises from about 45% to 90%, by weight,  
of the resole and 10% to 55%, by weight, of the crystalline phenolic compound.

19. . The method of claim 18 wherein the crystalline phenolic compound is  
bisphenol-A and the quantity of blend varies from about 8% to 90% by weight of the  
filler and blend .

20. The method of claim 18 wherein the molding temperature is from about 150° C to  
about 180° C.

21. The method of claim 20 wherein the quantity of resole resin is from about 60% to  
80%, the quantity of crystalline phenolic compound is from 20% to 80% and the in-mold  
cure time varies from about 45 to 180 seconds.

22. A method for increasing the length of flow of a thermosetting spray-dried resole  
resin which comprises blending said resin with a crystalline phenolic compound having  
two or more hydroxyphenyl groups wherein the quantity, by weight, of resole resin to  
crystalline phenolic compound varies from about 45% to 90% for the resole resin and  
the quantity of crystalline compound varies from about 10% to 55%.

30 23. The method of claim 22 wherein the quantity of resole resin varies from about

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60% to 80% and the quantity of crystalline compound varies from about 20% to 40%, by weight.

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